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Professional paper

VENOTONICS PLAY A SIGNIFICANT ROLE IN REDUCING THE SYMPTOMS OF VARICOSE VEINS: A CASE REPORT

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Abstract

Postthrombotic or postthrombophlebitic syndrome is a chronic venous insufficiency that occurs after an episode of thrombosis of the veins of the deep venous system. The terminal phase of HVI is manifested by the appearance of wounds on the legs, the localization of which is the lower leg. The prevalence of HVI largely depends on the geographical localization. The highest incidence is in Western countries. A 50-year-old patient comes for examination due to swelling in the area of both lower legs, which was more intense when standing or sitting. Visible livid discoloration in places on the foot and around the ankle joints. Feeling of warmth in the legs, cramps. She is a textile worker by profession (who spends 8 hours in a sitting position). From past illnesses, she gives information about diabetes mellitus type 2 and has been on insulin therapy for 15 years with regulated glycaemia, very rarely has oscillations in it. From family history - her father had varicose veins. A local venotonic, an oral venotonic, and elastic compression stockings were given. At the first check-up after 3 weeks, the patient had a significant improvement in her symptoms, and after 3 months of use, the changes were completely regressed.

Keywords: diabetes mellitus, blood vessels, ulcus crurum, peripheral artery disease

Introduction

Chronic venous insufficiency (CVI) is a set of pathological conditions that, due to increased venous pressure, contribute to the development of progressive stasis, which is the basic condition for the appearance of inflammatory and trophic changes in the subfascial structures, subcutaneous tissue and skin. Post-thrombotic or post-thrombophlebitic syndrome is chronic venous insufficiency that occurs after an episode of thrombosis of the veins of the deep venous system. The terminal phase of CVI is manifested by the appearance of wounds on the legs, the localization of which is the lower leg. The prevalence of CVI largely depends on the geographical localization. The highest incidence is in Western countries. According to data from the available literature, the prevalence of CVI varies from 1%-40% in women and 1%-17% in men. In the USA, the prevalence is 2-5% of the general population, it is estimated that 600,000 have CVI, and over 500,000 have ulcerative lesions on the legs. The development of HVI can be due to primary or secondary causes. Primary – reduced number of venous valves, congenital absence of venous valves, congenital weakness of the venous walls, increased predisposition to the development of varicose veins. Secondary – obstruction and insufficiency of the venous system of the legs. Risk factors – hereditary factors, gender (women), age (after puberty), varicose veins, obesity, injuries (fractures), inflammatory processes of superficial and deep blood vessels, reduced physical activity, professions related to prolonged standing or sitting in the same position, pregnancy, smoking, surgical interventions on the legs and others.

Case report

A 50-year-old patient comes for an examination due to swelling in the area of both lower legs, which was more intense when standing or sitting. Visible livid discoloration in places on the foot and around the ankle joints. Feeling of warmth in the legs, cramps. She is a textile worker by profession (who spends 8 hours in a sitting position). From past illnesses, she gives information about diabetes mellitus type 2 and has been on insulin therapy for 15 years with regulated glycemia, very rarely has oscillations in it. From family history - her father had varicose veins. On clinical examination, edema is present on both lower legs, visible telangiectasia more pronounced on the feet and around the ankle joints, venectasia, varicose veins. The patient underwent a Color Doppler echo of the lower extremities with the following findings: Arterial circulation - a normal three-phase signal of AF, AFS, AP, ATP, ATA, ADP is registered. Deep veins were neat and flowing without signs of DVT. Superficial veins: SFJ were competent. VSM lat dex minimally dilated along its entire length (upper leg 3.6 mm, lower leg 3.3 mm), numerous dilated superficial branches were visible, mostly in the lower leg. VSM lat sin also dilated along its entire length (upper leg 3 mm, lower leg 3.3 mm), multiple varicose branches were registered, mostly in the lower leg area. VSP were compressible, neat and had a normal outflow into the VP. Laboratory analyses showed HbA1c 7 mmol/L, glik 7 mmol/L. Local venotonics, oral venotonics and elastic compression stockings were given. At the first check-up after 3 weeks, the patient had a significant improvement in symptoms, and after 3 months of use, the changes were completely regressed.

Discussion

The prevalence of varicose veins and chronic venous insufficiency significantly complicates the lives of patients and thus burdens the healthcare system itself. Diabetes mellitus is one of the most common diseases in Western industrialized nations with about 300 million affected people worldwide. The metabolic state in diabetics leads to changes in almost all types of cells and organs in the body. Treatment for chronic venous sufficiency involves lifestyle changes and compression therapy. If these measures aren’t enough, your provider may recommend a procedure or surgery. The best treatment for you depends on how far your condition has progressed and other medical conditions you have. Your provider will tailor treatment to your individual needs. According to a number of authors the goals of treatment are to: help your blood flow better in your veins, help ulcers heal and limit their chances of coming back, improve your skin’s appearance, reduce pain and swelling, lifestyle changes. Usually, providers recommend lifestyle changes as the first method of treatment for CVI. These include, leg elevation for 30 minutes or longer at least three times per day. Exercise, walking and other forms of exercise can help blood flow better in your leg veins. Each time you take a step, your calf muscle squeezes and helps your veins pump blood back up to your heart. This “calf muscle pump” is known as your “second heart.” It helps blood in your legs defy gravity, and it’s vital for your circulation. Weight management. Compression therapy, providers commonly recommend compression therapy for treating CVI. Compression therapy helps ease swelling and discomfort in your legs. Medications used to treat CVI include mostly oral venotonics

Conclusion

The fact that skin changes can precede diabetes mellitus, they have great diagnostic importance. Skin changes can also develop during diabetes mellitus, but are sometimes associated with internal organs and their complications or occur as a side effect of antidiabetic therapy. In conclusion, VADs can be used for conservative treatment of CVD at any stage of the disease. They should be used in patients with symptomatic chronic venous disease who are not receiving interventional treatment. When prescribing VADs, attention should be paid to the intended outcome on a case-by-case basis. According to the latest guidelines, reduction of the broadest spectrum of subjective symptoms combined with a high safety profile can currently be achieved with VADs and compressive therapy in early stage

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